Wetland Protection Guidebook



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Michigan Department of Natural Resources Land and Water Management Division DNR



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INTRODUCTION

This guidebook was produced by the Michigan Department of Natural Resources (MDNR) primarily to provide you with information on the Goemaere-Anderson Wetland Protection Act and Michigan's wetland protection program. In its report to the MDNR, the Wetland Permit Process Review Committee identified the need for increased public awareness of Michigan's wetland protection program. In response to this request, this guidebook was produced by the MDNR to provide information on the uses and values of wetlands, as well as the wetland permit process in Michigan. The guidebook covers all aspects of wetland regulation in the state. Chapter 1 describes the history of wetland losses in Michigan and the United States, and explains why this is a public concern. Chapter 2 defines wetlands and describes each of the wetland types that occur in Michigan. Chapter 3 lists the functions that wetlands serve, and explains the value of each. Chapter 4 describes the laws that regulate wetlands in Michigan at the state and federal levels. Chapter 5 gives permit application and comment procedures. Chapter 6 describes wetland protection options for privately owned wetlands and the benefits of each to the landowner.

CHAPTER 1 - WHY PROTECT MICHIGAN'S WETLANDS?

1.1 Michigan's Wetland Heritage

Before European settlement, the region that would become Michigan was almost one third wetlands. The first voyageurs explored this area in the mid-1600's. They found a vast wilderness teeming with wildlife, and they stayed here because of the fortunes to be made exporting furs for European markets. Many of these furs were from wetland-dependent species like the beaver. The heyday of the fur trade was intense, and the beaver was trapped almost to extinction by the early 1800's. The economic activity generated by the fur trade, however, was sufficient to encourage the first immigration into the region. The fur trade, which was dependent on Michigan's wetland resource, played a central role in the establishment of the first European settlements here.

As settlement increased in Michigan and across the United States, pressures on wetlands increased also. Vast wetland areas were drained, primarily for agriculture. Much of the most productive farmland in Michigan was

once wetland. As cities and towns grew, still more wetlands were filled for development. These activities resulted in rapid wetland loss both in Michigan and across the country.

We can gain a better perspective on the current issues surrounding wetlands by looking briefly at the history of wetland losses in the United States and in Michigan.

1.2 Wetland Losses

In 1954, a widely accepted study estimated that the United States originally contained 215 million acres of wetlands. By the mid-1970's, only 99 million acres remained. The nation had lost 54% of its wetlands, and losses to agriculture and to commercial and residential development have continued.

During the 1970's, our awareness of the functions served by wetlands increased and efforts to protect our remaining wetlands were initiated. Congress passed amendments to the Clean Water Act that required permits for dredging or filling wetlands. Current estimates suggest that the remaining wetlands in the United States are still disappearing at an alarming rate, but no figures are available. Figure 1 shows the amount of our original wetlands that were left in the mid-1970's.

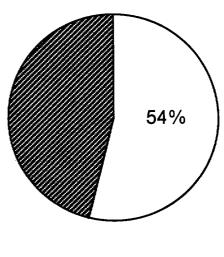




Figure 1: National wetland losses by the mid-1970's compared to original wetland acres.

Prior to the arrival of European settlers, Michigan contained an estimated 11.2 million acres of wetlands. In 1955, a survey for the U.S. Fish and Wildlife Service estimated that only 3.2 million acres remained. Michigan had lost 71% of its wetlands. Some coastal areas have lost an even larger percentage. Lake St. Clair, for example, has lost an estimated 80% of its wetlands. Overall, Michigan has lost an even greater percentage of its wetlands than the United States as a whole. Figure 2 shows the amount of wetland loss in Michigan by 1955.

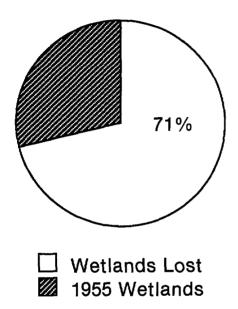


Figure 2: Michigan's wetland losses by 1955 compared to original wetland acres.

Since 1955, Michigan wetlands have continued to be filled or drained for agriculture and development activities. Though wetland regulations have reduced this loss rate, the current rate of loss is not known. There are also no current estimates of the total wetland acreage left in the state.

Each year, the Michigan Department of Natural Resources (MDNR) receives a greater number of applications for approval of dredge and fill activities in wetlands. In 1987, the Land and Water Management Division of the MDNR received 6,510 permit applications. Many of these proposed work in a wetland area, and those that were approved did result in some loss of wetlands. Those losses are often irrevocable. The Department has the difficult task of balancing the losses of wetlands and the func-

tions they provide with the benefits that accrue from developments proposed in wetlands.

CHAPTER 2 - WETLAND TYPES IN MICHIGAN

2.1 Wetlands Defined

Wetlands are extremely diverse habitats, from Great Lakes marshes to inland swamps. Nevertheless, all wetlands share certain common characteristics. These shared features are the basis of scientific definitions of wetlands. Wetlands are areas where water is a controlling factor in the development of plant and animal communities. It may be standing water above the ground, or an underground water table that is close to the surface. The water may be present during the entire year, or only during part of the year. Wetlands are often transitional areas between upland habitats and aquatic habitats.

The presense of water leads to other common characteristics of wetlands. Many types of plants prefer saturated wetland conditions, and these plants indicate to a field biologist that wetland conditions exist. The U.S. Fish and Wildlife Service has developed a comprehensive list of all the plants that occur in Michigan wetlands. The list also indicates whether the plants are always found in wetlands or sometimes found in drier habitats. Regulatory agencies can use this list to help determine if an area is a wetland.

In addition to particular species of plants, wetlands may have special types of soils. The presence of water in the wetland can prevent oxygen from reaching the organic matter in the upper layer of the soil. This organic matter often accumulates to form a dark mucky layer that is indicative of wetland conditions. In non-mucky soils such as sand or clay, the water can also give the soil particular patterns of coloration, such as mottles or streaks from minerals in the soil. Both of these soil types are called hydric soils. The Soil Conservation Service has developed descriptions that allow field biologists to determine if the soil in a particular area is a hydric soil.

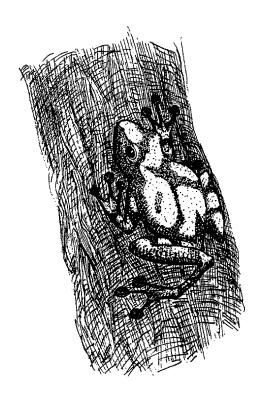
These three characteristics, the presence of water, wetland vegetation, and hydric soils, are widely accepted in the scientific community as useful indicators of wetlands. Most regulatory programs rely on some combination of these characteristics to determine if an area is a wetland.

In Michigan, there are three major types of wetlands. These classes of wetlands are familiar to most people. They include marshes, swamps, and bogs. Each has its own unique set of characteristics, plants, and wildlife.

2.2 Marshes

Marshes are excellent habitats and breeding grounds for water birds such as ducks, geese, swans, bitterns, and herons. Common loons, bald eagles, and osprey also utilize marshes for feeding or nesting areas, as do numerous species of song birds. Marshes are also home to fur-bearing animals, such as muskrat and beaver, and are important spawning grounds for some species of fish such as northern pike and perch.

Marshes are often associated with ponds, streams, or lakes. They can be wet areas which are periodically covered by standing or slow-moving, neutral to alkaline water, or can be "wet" freshwater meadows with high water tables. Typical marsh plants include rushes, reeds, sedges, cattails, and grass-like vegetation. Marsh soils are usually nutrient rich and contain both mineral and organic matter, although even pure sands may support marshes in some cases.



2.3 Swamps

Swamps are wooded or shrub wetlands. Although there are many variations, swamps can generally be divided into three different types based on vegetation: a conifer swamp with tamarack, cedar, balsam fir, and/or spruce trees; a hardwood swamp with, for example, maple, ash, birch, aspen, and/or poplar; or a scrub-shrub swamp with alders, willows, and/or dogwood. Swamps are important habitat for deer, bear, raccoons, bobcats, eagles, songbirds, and other small animals.

Swamps are usually covered by water at some time during the year. They may have high water tables during the spring, or at some other time during the growing season. They may or may not be associated with lakes, rivers, or streams. The soil is often rich in nutrients and organic matter and, again, may consist of clays or sand.

2.4 Bogs

Bogs are wetlands with peat soils, a high water table, and a surface carpet of mosses, especially *Sphagnum*. Unique vegetation can be found in bogs, including shrubs in the blueberry family (leather-leaf, blueberries, cranberries, and others), sedges and cotton grasses, peat moss, orchids, and plants such as the pitcher plant and sundew, which catch and "digest" insects.

Bogs are generally not rich in wildlife, but birds and other animals can be seen there. Bog soils are highly acidic, oxygen deficient, and mineral poor.

Some boggy areas are more mineral rich and are only moderately acidic. These variations are technically known as "fens", although they also have peat soils, a high water table, and many of the plant species found in bogs. Fens are sometimes associated with lakes, marshes, and streams, and are usually more valuable than bogs as wildlife habitat.

CHAPTER 3 - WETLAND VALUES

3.1 Introduction

Long perceived as wastelands with few redeeming characteristics, wetlands are now being recognized as valuable natural resources. Biologists and ecologists have studied the values of wetlands as habitats for diverse plant

and animal life. Hydrologists have begun to understand the relationships between wetlands and groundwater, which is the source of much of our drinking water. Municipal officials have begun to recognize that wetlands can store water and prevent costly flood damage.

Because the functions wetlands serve are so diverse, it is helpful to consider each one separately. This chapter will cover five major categories of wetland functions, and describe each in detail.

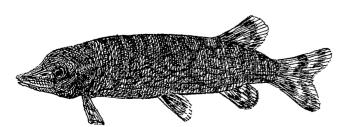
3.2 Fish and Wildlife Habitat Values

Wetlands provide habitat for a wide variety of plants and animals. This is probably the most commonly recognized value of wetlands.

A) Fish Habitat

Wetlands serve three major kinds of functions for fish communities. They provide breeding and nursery grounds, act as sources of food, and provide cover from predators, especially for young fish. Most species of freshwater fish are dependent on wetlands for one or more of these functions. Many fish species that are important in sport or commercial fisheries spawn in shallow marshes and aquatic plant bed wetlands. These include northern pike, muskellunge, yellow perch, large and smallmouth bass, bluegill, black and white crappie, pumpkinseed sunfish, black and brown bullhead, and many forage/bait species. Aquatic invertebrates living in emergent and submergent wetlands provide food for all fish that utilize wetlands during some stage of their life cycle. Many freshwater fish prefer vegetated habitats because of the protection they provide from predators.

The larger carnivorous fish, such as northern pike, muskellunge, small and largemouth bass, and walleye, depend on food produced largely in wetlands and shallow marshes around warm water inland lakes, streams, and Great Lakes areas. In cold inland lakes, streams, and the Great Lakes, rainbow, brown, brook trout, and salmon depend on food resources that originate in wetlands and shallow marshes.



B) Waterfowl

Marshes are among the most productive wildlife habitats in the world. This productivity supports a variety and abundance of wildlife. including many species of waterfowl. Many species of waterfowl depend on wetlands for feeding and resting areas during their spring and fall migration. Resident waterfowl rely on them for nesting and as primary feeding areas. Broods hatched in early summer forage on insect larvae and aquatic invertebrates, which provide the protein-rich diet needed for rapid growth and development. Many different species nest in Michigan, including the mallard, northern pintail, canvasback, bluewinged teal, redhead, common and hooded merganser, and Canada goose. These species are enjoyed by bird-watchers and by waterfowl hunters.

Two additional species of ducks depend on wooded swamps. The American black duck nests and rears its brood in the dense cover around swamps. The wood duck, whose striking colorations are admired by many, nests in hollow trees near swamps.

C) Non-game Birds

In addition to the waterfowl species that are popular with hunters, wetlands support a wide variety of other bird species. The familiar song of the red-winged blackbird, which nests in marshes throughout Michigan, is associated by many with a marsh in springtime. Many other less common birds inhabit the marshes as well. Great blue herons, American bitterns, and least bitterns can be seen quietly stalking their prey in marshes and ponds. Soras, yellow rails, and Virginia rails are more secretive, and are often recognized only by their call. Common terns and caspian terns inhabit Great Lakes coastal marshes, where they can be seen making spectacular dives into the water in the pursuit of fish. Northern harriers can be seen hunting small mammals over marshes and grasslands. The vociferous common yellowthroat can be heard announcing its presence from the edges of thickets and shrub swamps. These species are enjoyed by bird-watchers and outdoor enthusiasts, and also play important ecological roles in wetland communities.

D) Furbearing Mammals

Wetlands provide habitat for many of the most important furbearing species in Michigan. Muskrats inhabit marshes, and consume large quantities of cattails, one of their most preferred foods. Mink spend much of their time in the water, and forage on other wetland inhabitants, including small mammals, birds, frogs, and fish. Beaver construct their familiar lodges in rivers and streams, and often play an important role by creating marsh habitat behind their dams. These species are enjoyable to watch and also commercially important because their pelts are sold for various fur products.

E) White-tailed Deer

In northern areas of the state, wetlands can be vital for sustaining white-tailed deer populations through the harsh winter. Cedar swamps provide high-quality browse during the winter. Deer can sustain themselves solely on northern white cedar if enough is available, and this is true for no other winter food. In addition, the dense vegetation in cedar swamps provides cover from winter weather. Without this cover, deer would be unable to survive the harshest periods during the winter.

F) Endangered and Threatened Species

Wetlands provide essential habitat for a wide variety of endangered plant and animal species. Approximately 30% of Michigan's 215 threatened and endangered plants and approximately 60% of the 65 threatened and endangered animals are wetland species.

Some of the threatened and endangered wildlife species are among Michigan's most popular wildlife. The common loon builds nests in marshy areas of lakes and feeds on small wetland-dependent fish species. The osprey nests on dead snags in wooded swamps, and also fishes in nearby wetlands. Michigan's two endangered snakes, the Kirtland's snake and copperbelly water snake, as well as the threatened fox snake, are dependent on wetlands. The endangered and beautiful prairie white-fringed orchid is an obligate wetland species, existing in no other habitats.

G) Other Wildlife

Wetlands are also one of the most productive habitats for insects, both aquatic and terrestrial, and thus form the base for a rich and diverse food web extending well beyond the wetland boundary. Waterfowl, wading birds, songbirds, even bats, depend on these insect-based food webs as do a variety of reptiles and amphibians. Many species of turtles, snakes,

frogs, toads, and salamanders live in and are dependent upon wetlands. These species play an important role in the ecological balance of the wetland community.



3.3 Maintenance of Water Quality

Wetlands have been shown to provide many valuable functions related to the maintenance of water quality. Different types of wetlands provide different functions, but many types of wetlands contribute to the maintenance of water quality in one or more of the following ways:

A) Nutrient Retention

Wetlands can retain, at least temporarily, nutrients that would otherwise reach streams, rivers, or lakes, and contribute to increased growth of algae. There are many ways that nutrients can be held in wetlands. Plant life absorbs soluble nutrients from the water and uses them for growth. Some nutrients become attached to sediments. Plant matter that contains nutrients can settle to the bottom and become incorporated into sediments, where the nutrients are unavailable. Some of this material can become the base of the food web. Some microorganisms convert the nitrogen present in organic matter into nitrogen gas, removing the nutrient from the wetland. As much as 91% of the phosphorus and 86% of the nitrogen can be retained on at least a seasonal basis by emergent wetlands. The benefit of holding these nutrients is that the water quality of downstream ponds and lakes is protected from unwanted growth of algae and aquatic weeds during the primary recreational season.

B) Sediment Removal

The sediments that are suspended in running water can also be removed by wetlands. As the running water enters a wetland with dense vegetation, the water slows and the sediments settle out. Emergent wetlands can retain as

much as 94% of the inflowing sediments. This protects rivers, ponds, and lakes from the accumulation of sediments.

C) Groundwater Recharge and Discharge

Wetlands are often interconnected with the groundwater table. Some wetlands recharge groundwater, while others discharge groundwater. Both of these functions can be valuable. Recharge areas provide clean groundwater, which many people use for drinking water. Discharge areas provide sources of high-quality water for lakes and streams.

3.4 Flood Storage and Runoff Delay

Wetlands provide very valuable functions by reducing the severity of floods. Every year, floods cause serious damage to property in Michigan. Many wetlands are effective as storage basins for flood waters. This storage helps to reduce flood levels. In addition, because flood waters are held in wetlands instead of flowing directly down rivers and streams, much of the water takes longer to reach flooded areas. Depending on the location of the wetland, the delay can significantly reduce flood peaks and resulting damage. Some government agencies now maintain wetlands for flood control instead of building costly flood control structures.

3.5 Recreation and Aesthetics

There are many recreational activities that involve wetlands. Hunting and fishing for wetland dependent species is a major recreational activity in Michigan. In addition, there are growing numbers of people who enjoy non-consumptive uses of wetlands such as hiking, boating, birdwatching, and photography. These activities generate enormous economic benefits by creating demands for support services such as travel and lodging. The diverse wildlife, beautiful scenery, and quiet solitude attract many people to Michigan's wetlands for recreation.



CHAPTER 4 - WETLAND REGULATION IN MICHIGAN

4.1 The Goemaere-Anderson Wetland Protection Act

At the center of Michigan's wetland management program is the Goemaere-Anderson Wetlands Protection Act. Act 203, P.A. of 1979 (see Appendix A). Act 203 has several components. First, it establishes a state policy to protect the public against the loss of wetlands and makes explicit findings about the benefits wetlands provide. Second, it establishes a permit program regulating some activities in wetlands which are above the ordinary high water marks of lakes and streams. Third, Act 203 explicitly authorizes more stringent and broader regulation of wetlands by local governments and sets up a cooperative process for the sharing of information and expertise between the MDNR and local governments.

Wetlands below the ordinary high water mark of a lake or stream are considered part of the lake or stream and are covered by the same acts that regulate activities there. In these cases, however, Act 203 criteria still apply to any permits that may be issued. The Inland Lakes and Streams Act, P.A. 346 of 1972, regulates dredging, filling, and construction activities in inland lakes and streams and associated wetlands below the ordinary high water mark. The Great Lakes Submerged Lands Act, P.A. 247 of 1955, applies to the Great Lakes, including adjacent wetlands.

The basic premise of the regulations is that wetlands provide public benefits and no one has the unrestricted right to alter the natural character of wetlands since some alterations could pollute the water, increase flood risks, lower lake or well water levels, destroy fish and wildlife habitat, or cause other public nuisances or harms. A permit under Act 203 is required only for dredging, filling, draining, and developments that are (1) in a wetland as defined in the act; (2) not subject to a permit under Act 346 or Act 247; and (3) not exempted in section 6(2) of the Wetlands Act. Each of these requires some elaboration.

Definition - The definition of wetlands in the Act has two components. First, the Act regulates only wetlands where water (surface or subsurface) is present at a frequency and duration sufficient to support wetland vegetation or aquatic life.

Second, wetlands are separated according to whether or not they are contiguous to a water-

body. Contiguous wetlands are those found in close proximity to a lake, stream, pond, Great Lake, etc., and/or having a direct hydrological relationship with it. Non-contiguous wetlands, often described as being "perched", are isolated from surface waters hydrologically and often geographically as well.

Activities in contiguous wetlands are regulated without regard to the size of the wetland because of the close relationship these areas have to surface waters. Non-contiguous wetlands, however, are regulated by permit only if they are greater than five acres in size. In counties of less than 100,000 people, activities in non-contiguous wetlands are not regulated until a wetland inventory is completed. The MDNR can also regulate some activities in wetlands anywhere in the state, regardless of size, if they are determined to be essential to the preservation of natural resources, and the landowner has been so notified by the department.

Exemptions - Activities in wetlands subject to Act 346 or Act 247 permits are not subject to an additional Act 203 permit, although the Act 203 criteria apply to the other state acts. This prevents unnecessary duplication of permits.

A variety of activities are exempted from the need for an Act 203 permit in section 6(2), although the Michigan Environmental Protection Act (MEPA), P.A. 127 of 1970, and other laws still apply. Although specific circumstances may exclude a particular situation, in general it can be said that exempted activities include:

- some existing farming activities including minor drainage, which is defined by the Act;
- harvesting of forest products;
- some minor road improvements if adverse effects on the wetland are minimized and width is not added or rerouting necessary;
- distribution power line construction and maintenance if adverse effects are minimized;
- small gas or oil pipeline construction if adverse effects are minimized;
- iron and copper tailings basins and water storage;
- straightening, widening, or deepening of private agricultural drains and drains constructed or improved (not just designated) pursuant to the Drain Code of 1956, as amended, but only if

necessary for agricultural production;

- drainage of non-contiguous wetlands (unless designated as necessary for preservation by the MDNR) if necessary for crop production provided that any future non-farming use requires a permit;
- construction of farm roads, forestry roads, or temporary roads for moving mining or forestry equipment if adverse effects are minimized.

General Permits - The MDNR may issue general permits on a state or county basis for a category of activities that are similar in nature and have only a minimal adverse effect, both individually and cumulatively, on the environment. A general permit allows the Department to quickly reach a decision when public notices would be impractical due to the small impact being proposed. This allows the MDNR to process minor applications more efficiently. The department may process by public notice an application which would normally qualify under a general permit category to allow more opportunity for public review and comment. General permits can also be revoked or modified if any adverse effects warrant the use of individual permits.



Administration - The MDNR's Land and Water Management Division administers the permit program. However, local governments may also adopt wetlands ordinances. In this case, an application for a permit is also filed with the local government.

Enforcement - Failure to obtain a necessary permit, or a violation of a condition or limitation in a permit issued under the Act, is subject to civil

and criminal penalties. Actions may be brought by either local prosecutors or by the Attorney General and, if found to be in violation, financial penalties, restoration, and/or jail sentences may be imposed by a court. A person who violates the Act is punishable by a fine of up to \$2,500. Willful or reckless violations of permit conditions by a person or corporate officer can result in a fine of not less than \$2,500 nor more than \$25,000 per day of violation, and/or by imprisonment for not more than one year. A second such violation is a felony, with penalties up to \$50,000 per day of violation and up to two years imprisonment. In addition to these penalties, the court may order a person who violates the Act to restore the affected wetland as closely as possible to its original condition.

The MDNR Land and Water Management Division investigates reports of possible violations and, if it is determined that a violation has occurred, appropriate enforcement action is initiated. The federal government, or local governments with wetland ordinances, may also choose to pursue enforcement action independent of any state action.



4.2 Other State Laws that Affect Wetlands

The Soil Erosion and Sedimentation Control Act (Act 347, P.A. of 1972) is designed to protect the waters of the state from sedimentation caused by soil erosion. Permits are required for earth changes which disturb one or more acres of land or which are within 500 feet of a lake or stream, or for alterations in the stream excluding plowing, tilling, mining, and logging land uses. A soil erosion and sedimentation control plan is required as well. Permits are issued by counties or other bodies with programs approved by the MDNR.

The Subdivision Control Act (Act 288, P.A. of 1968) requires the approval of the Water Resources Commission for any subdivision plat containing lots in the floodplain and requires an informational review by the MDNR for any subdivision plat involving land abutting a lake or stream or a proposed channel affording access to a lake or stream where public rights may be affected. In many cases, wetlands are involved and are brought to the attention of the developer and appropriate agencies during the review process.

The Michigan Environmental Protection Act (MEPA) (Act 127, P.A. of 1970) places a duty on all individuals and organizations, whether private or public, to prevent or minimize environmental degradation which is caused or likely to be caused by their activities. Its requirements are in addition to those provided by any other law.

MEPA prohibits any conduct which is likely to pollute, impair, or destroy a lake, stream, wetland, or other natural resource of the state unless the entity proposing or authorizing the activity can show (1) there are no less harmful feasible and prudent alternatives and (2) the "conduct is consistent with the promotion of the public health, safety, and welfare in light of the state's paramount concern for the protection of its natural resources from pollution, impairment, or destruction". Any person, organization, or governmental body can go to court to enforce MEPA against any other person, organization, or governmental body.

The Flood Plain Regulatory Act (Act 167, P.A. of 1968) assesses the location and extent of floodplains, streambeds, and stream discharge for the state's watercourses to prevent dangerous flooding events. Permits are required to alter a floodplain.

The Shorelands Protection and Management Act (Act 245, P.A. of 1970) regulates environmental areas important for fish and wildlife along the Great Lakes, many of which are wetlands.

4.3 Federal Regulation of Wetlands in Michigan

A) Section 10 of the Federal River and Harbor Act

In Michigan, the Corps of Engineers administers programs that affect wetlands adjacent to the Great Lakes and their connecting waterbodies, along major navigable rivers (for example, the Corps' jurisdiction extends along the Grand River some 40 miles inland), and along mouths of major tributaries and connected wetlands.

Section 10 of the River and Harbor Act of 1899

(33 U.S.C. 403) regulates construction and dredge and fill work involving the nation's navigable waters. The Corps has the authority to bring enforcement actions, including criminal or civil actions, against violators of this law. Section 10 regulates virtually all work in, over, and under waters listed as "navigable waters of the United States." Some typical examples of projects requiring Section 10 permits include beach nourishment, boat ramps, breakwaters, bulkheads, dredging, filling or discharging material (such as sand, gravel, or stone), groins and jetties, mooring buoys, piers (seasonal or permanent), placement of riprap for wave protection or streambank stabilization, boat hoists, pilings, and construction of marina facilities.

On the Great Lakes and other listed navigable waters of the U.S., the Corps' regulatory authority extends to the ordinary high water mark. For example, the ordinary high water mark elevation for Lakes Michigan-Huron is 580.8 feet (International Great Lakes Datum). During high water periods, it is the water's edge or ordinary high water mark, whichever is higher. On inland waterways listed as "navigable waters of the U.S.", such as Lake Charlevoix, the Corps' regulatory jurisdiction extends landward to the ordinary high water mark and any adjacent wetlands.

B) Section 404 of the Federal Clean Water Act

Section 404 of the Clean Water Act regulates the discharge of dredged or fill material into the waters of the United States, including adjacent wetlands. It covers activities such as placement of fill material for impoundments, causeways, road fills, dams, dikes, and property protection devices such as riprap, groins, back fill shoreward of seawalls, breakwaters, or revetments, and beach nourishment. Adjacent wetlands often extend landward beyond the ordinary high water mark. The 404 program is intended to minimize adverse impacts by preventing the unnecessary loss of wetlands and other sensitive aquatic areas.

The MDNR assumed administration of the Section 404 wetlands program in August of 1984. Assumption was granted because of the Act 203 program, but was also based on Act 346, Act 247, Act 245, and several other environmental statutes. However, the Corps has retained jurisdiction over the Section 10 activities as described above and Section 404 activities in and adjacent to the Great Lakes, their connecting waterways, wetlands adjacent to navigable rivers, and the mouths of major tributaries of navigable rivers. For example, dredge and fill

activities in wetlands adjacent to the inland water route (a chain of lakes open to Lake Huron) require a permit from both the MDNR and the U.S. Army Corps of Engineers. On most waters, only an MDNR permit is required, although the federal government retains the authority to review, comment, and require a separate permit when necessary to comply with Section 404 of the Clean Water Act.

When the application proposes a major discharge or work in a sensitive wetland area, the U.S. Environmental Protection Agency provides comments on water quality issues and compliance with the 404(b)(1) Guidelines. The U.S. Fish and Wildlife Service also reviews such permit applications to assure that the impacts on wildlife and endangered species are minimal per the Fish and Wildlife Act of 1956 (16 U.S.C. 742a, et seq.), the Migratory Marine Game-Fish Act (16 U.S.C. 760c-760g), the Fish and Wildlife Coordination Act (16 U.S.C. 661-666c) and the Endangered Species Act (16 U.S.C. 1531 et seq.). The Corps also reviews major discharges, and may provide technical and environmental comments. In addition to these regulations, the National Environmental Policy Act of 1969 (NEPA) (42 U.S.C. 4321-4347) declares the national policy to encourage a productive and enjoyable harmony between people and the environment.

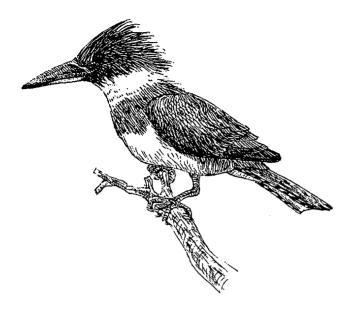
4.4 County and Local Regulations

Counties, townships, and cities may enact their own wetland zoning ordinances. Act 203 authorizes municipalities to provide more stringent definition and regulation of wetlands than provided under the Act [Section 8(4)]. This authority is supplemental to the existing authority of a municipality to enact zoning ordinances under the County, Township, and City-Village Zoning Enabling Acts.

More and more local governments are enacting local wetland zoning ordinances. They vary greatly in length and approach. Some ordinances require a zoning permit for wetland activity similar to an MDNR permit, while others serve only to notify landowners of the need to get an MDNR permit. Potential applicants for MDNR permits should review the local zoning ordinance to assure compliance with any wetland provisions.

Indirectly, county and local sanitary codes which regulate the placement of septic systems may restrict activities in wetlands. If a sanitary code prohibits septic systems in areas with high water tables, then those areas are not likely to be used as building sites requiring dredging and

filling. These high water table areas may also be wetlands. Anyone contemplating construction of a residence or other facility needing on-site sewage treatment should consult with the local health department.



CHAPTER 5 - WETLAND PERMIT PROCEDURES

5.1 Wetland Protection Act Application Procedure

If you own property and think some of it may be a wetland, you should contact the MDNR before planning or beginning any construction projects in the area. The MDNR will make a wetland determination for any property owner (or someone who has the owner's written permission) who requests it. A member of the MDNR's field staff will visit the property and examine the characteristics of the land, and provide you with a determination of what portions of your property are wetlands.

The wetland protection program is coordinated from Lansing, and copies of laws, rules, permit applications, and instructions are available from the following address:

Michigan Department of Natural Resources Land and Water Management Division Wetland Protection Unit P.O. Box 30028 Lansing, MI 48909 (517) 373-1170

Information and forms are also available at MDNR Regional and District Field Offices. There are 16 of these across Michigan, and they can provide assistance in determining if a permit is necessary or in filling out an application.

Check your phone book or write to the address above to obtain a list of these field offices.

Applications are reviewed for completeness by the MDNR in accordance with Act 203. Once an application is complete, the MDNR must make a decision to grant, deny, or modify an application within 90 days, or within 90 days following a public hearing if one is held.

5.2 MDNR Notification of Applications for Wetland Permits

Many people are interested in what wetland-related activities are occurring in their area. As mentioned in Chapter 2.1, the MDNR Land and Water Management Division administers the Michigan Wetland Protection Act and others discussed above. Anyone can receive weekly notice of all permit applications (example provided as Appendix C) the MDNR receives for a \$25.00 annual fee, payable to the State of Michigan, which should be sent to:

Land and Water Management Division Michigan Department of Natural Resources P.O. Box 30028 Lansing, MI 48909

A formal public comment period is provided for an application if the MDNR issues a public notice (not to be confused with the application listing). When the activity is of a greater scale than those covered under a general permit, or when determined to be appropriate even if under a general permit, a public notice, along with a copy of the application, is issued and sent to the municipality where the activity would occur, the adjacent property owners, and any other interested parties that request it. including state agencies, public and private organizations, and individuals. The public has 20 days to submit written comments on the proposed activity. The local government where the activity would occur has 45 days to file comments. If a copy of the application is not posted with the public notice, a special request can be made to the MDNR for a copy of the application. Also, the MDNR does not routinely send public notices to individuals. A special request must be made to receive notices for a specific area or project.

Public notices are not normally issued for applications that meet the general permit provisions. These applications are reviewed under general permit criteria, as described in Chapter 4.1. A list of current general permits is available from the MDNR.

5.3 Public Hearings

The MDNR will hold a public hearing to receive public comment on a proposal if necessary to obtain pertinent information or if requested to do so. Individuals may request a public hearing as part of their comments within the 20-day comment period. The MDNR may determine that an application would have significant enough impact to warrant a public hearing even without a request. A local government (with or without its own ordinance) may hold its own hearings on the application and has 45 days to comment to the MDNR.

When a joint public notice is issued and a hearing is requested, the MDNR is the agency most likely to conduct the hearing. The Corps may or may not hold a hearing, depending on whether or not they feel the public comment would aid them in the decision making process.

5.4 Evaluation of Permit Applications

According to sections 9(1) and 9(4) of Act 203, no permit can be issued unless (1) it is "otherwise lawful"; (2) it is "necessary" — it meets a demonstrable need in the community; (3) it is in the "public interest"; (4) an "unacceptable disruption will not result to the aquatic resources"; and (5) either a "less harmful feasible and prudent alternative" does not exist or the "proposed activity is primarily dependent upon being located in the wetland."

In determining whether these tests are met, a prospective applicant should ask the following questions. Are there any feasible and prudent alternative locations outside a wetland which could be used, including areas not presently under the applicant's control but reasonably obtainable? If not, are there alternatives on the site that would eliminate or minimize impacts to wetlands? The Act does not allow issuance of a permit unless the applicant has examined alternatives and has demonstrated that those that are available are not "feasible and prudent."

Issues reviewed by the MDNR include the following: Has the applicant performed the necessary analysis of alternatives and are the conclusions justified? If so, will the activity still cause an unacceptable amount of harm to the water resources in the area, considering the Section 9 criteria? These criteria include: the effects on public and private uses of the wetland and on the wetland's natural benefits, the cumulative effects in relation to other existing and anticipated activities in the watershed, the proximity to a waterway, the size of the wetland

and amount of wetlands in the area, the public and private economic value, alternatives, and the need for the activity. Findings of need by other state agencies must be considered as well as other evaluations of public interest and need.

It is helpful in the evaluation of a project if people with knowledge of the site comment specifically about its characteristics, including the birds, mammals, or fish they have seen there. Information about other values of the wetland, including water quality values, is also very helpful in evaluating the wetland. If the project would destroy or impair these wetland functions, that should be described in comments to the MDNR. If the project would improve or enhance these functions, that information will also assist in the review of the project.

The MDNR staff visits each application site to determine the potential environmental impact from the proposed activity. If a project is complicated, additional visits may occur. Any individual or group commenting on an application should have first-hand knowledge of the wetland site's values and functions in order to determine the potential project impacts. Permission to visit the site must be obtained from the landowner before entering any private property.

5.5 When the U.S. Army Corps of Engineers is Involved

As explained in Chapter 4.3, the Corps has authority to issue permits for activities regulated under Section 10 of the River and Harbor Act, and on wetlands adjacent to navigable waters under Section 404 of the Clean Water Act. In most cases along or near the Great Lakes, the Corps' jurisdiction overlaps the MDNR's, and a "joint public notice" is issued by the Corps based on a single application. Both agencies independently review the application, and both must reach a decision separately. Comments on applications are received by both agencies when a joint public notice is issued. Included with the joint notice is a description of the proposal and sketches of the proposed activity. As with the MDNR notice, individuals usually have 20 days to file comments. To receive Army Corps notices, write to:

District Engineer
Detroit District
U.S. Army Corps of Engineers
P.O. Box 1027
Detroit, MI 48231

The Corps also has the authority to issue general permits. Typically, if an activity is reviewed under an MDNR general permit, the activity would qualify for a Corps general permit as well, although there may be some differences in current categories.

5.6 Decisions on Permit Applications

The MDNR has 90 days to make a decision after receiving a complete application. The public may request a hearing within 20 days of the date the public notice is issued. If a public hearing is held, the 90 day period for a decision begins after the hearing.

If a permit is issued, performance conditions will be attached assuring that the activity will be completed consistent with applicable law. If a permit is not applied for when it should have been, or if the permit is denied, going ahead with the project is a violation of the law and enforcement action may be pursued as described in Section 4.1 above. Any aggrieved person disliking the MDNR's decision on a permit may request a formal hearing from the MDNR to review the decision. If appeals to the MDNR are exhausted, then the matter may be taken to court.

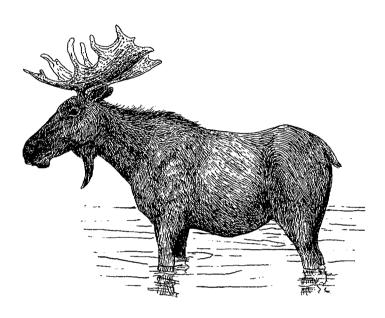
If the local government denies a permit application under its ordinance, the MDNR will refuse to issue an Act 203 permit except where developments with statewide or regional benefits are involved. A local decision to issue a permit, however, is not binding on the MDNR if Act 203 standards would be violated. Local ordinances have their own remedies for violations.

5.7 Mitigation

The use of mitigation is becoming more and more common as a component of applications and permits. The term "mitigation" refers to: (1) methods for eliminating or reducing potential damage or destruction to wetlands; (2) ways to repair or restore unavoidable damage; and (3) creation of wetlands to offset the loss. The most common procedure is to compensate for wetlands destroyed by creating wetland habitat on site or, where necessary, at another near-by location.

Wetland creation is an imperfect science. There is uncertainty as to whether humans can duplicate complicated natural wetland systems. The MDNR and the Corps do not issue permits based on mitigation plans. They consider the total impact of the proposal without the possible compensation. However, both agencies have

approved permits that include mitigation for unavoidable losses and where the projects will otherwise not cause unacceptable disruption to the aquatic resources, will be in the public interest, etc. In reviewing proposed mitigation plans, the Department considers whether or not the functions of the existing wetlands will be replaced by the mitigation.



CHAPTER 6 - VOLUNTARY WETLAND PROTECTION AND BENEFITS TO LANDOWNERS

Regulation of wetland use is typically the focus of most wetland protection efforts. However, non-regulatory management techniques can play an important role in long-term wetland protection for the following reasons. First, state and local wetland regulations contain exceptions for activities such as agriculture or existing uses. Second, regulations can be changed by succeeding legislative bodies.

The state wetland laws and local wetland zoning are the basis of the wetland protection program. To be most effective, however, these regulations should be coordinated with non-regulatory techniques. Four such techniques are discussed here, including the pros and cons of each — land donation, conservation easements, deed restrictions, and purchase.

Land Donation - Where a private foundation or government agency is interested, the most direct and efficient method of wetland protection is through land donation. A donor's gift of land is tax deductible if it is made to a statewide or local land trust, governmental entity, or any other nonprofit, charitable organization under Section 501(c)(3) of the Internal Revenue Code.

Each donation of land has different tax advantages for different individuals. Different types of taxes, e.g. real property taxes, gift taxes, or income taxes, are affected differently in each situation. Landowners considering donation of wetland property may wish to retain a tax attorney or accountant to analyze the benefits in their particular situation.

Conservation Easements - Conservation easements can be used to transfer certain rights and privileges concerning the use of land or a body of water to a non-profit organization, governmental body, or other legal entity without transferring title to the land. In Michigan, Public Act No. 197 of 1980, the Conservation and Historic Preservation Easement Act. (M.C.L.A. 399.251 et. seq.) authorizes the creation of voluntary conservation easements. A conservation easement under Act 197 can provide limitations on the use of, or can prohibit certain acts on, a parcel of land or body of water. The interest can be in the form of a restriction, easement, covenant, or a condition contained in either a deed, will, or other instrument. The easement should require that the land or body of water be retained or maintained in its natural, scenic, or open condition, or in a specific use such as agriculture, open space, or forest.

The easement is enforceable against the property owner even if the party seeking enforcement was not a party to the original conveyance or contract. The easement is considered a conveyance of real property and must be recorded with the register of deeds in the appropriate county to be effective against a subsequent purchaser of the property who had no notice of the easement.

As with land donations, the granting of a conservation easement may have tax implications. Again, persons considering granting a conservation easement should contact an attorney or accountant for an analysis of possible tax benefits, as well as their local government for information about zoning, etc.

A particular type of easement is authorized under the Farmland and Open Space Preservation Act, P.A. 116 of 1974, which offers tax reductions for landowners who agree not to develop open space land. These easements are subject to the approval of the local government. Contact the MDNR Land and Water Management Division for more information.

Deed Restrictions - Clauses placed in deeds restricting the future use of land can prohibit uses or activities by the new owners that would destroy, damage, or modify wetlands. The Conservation and Historic Preservation Easement Act allows for deed restrictions along with easements.

When land is donated or devised, the donor may include a reverter clause that provides that, if the

land is not managed according to the restriction, the property must be returned to the original owner or to a third party, such as a non-profit land trust or government body.



Purchase of Wetland Property - Acquisition of wetland property is a straightforward, hopefully permanent, protection method. The purchaser should consider all the options, i.e., purchase of fee simple title, easements and development rights, bargain sales, and other purchasing methods. A fee simple purchase provides the purchaser with more permanent control and protection, but a less than fee simple purchase (such as purchase of an easement or development rights) has advantages also. First, a less than fee purchase is less costly, and second, the original owner retains title and continues to pay taxes so the local community does not lose its tax base (although the assessment may be reduced).

Innovative purchasing methods should be considered by the purchaser. The bargain sale provides large tax incentives to the seller while reducing the purchase price for the buyer. Option contracts may also be useful mechanisms.

The following is a list of several possible sources of funds for wetland purchases:

 Michigan Natural Resources Trust Fund - this fund is a possible source of money to purchase choice recreational, scenic, and environmentally important land here in Michigan. Application must be made to the fund for approval by April 1 of each year, and can be obtained from the MDNR Recreation Services Division.

- Michigan Duck Stamp Program funds from sale of stamps and proceeds from the contest go to purchase of wetlands by the State. Contact the MDNR Wildlife Division.
- Private sources donations from private individuals or corporations in the form of specific property or money. This would include grassroots fundraising efforts from local citizens, lake associations, and other community groups.
- 4. The Michigan Nature Conservancy, Michigan Nature Association, Ducks Unlimited, local land trusts, and sometimes local governments can be potential funding sources. The Michigan Nature Conservancy maintains a list of local land trusts and how they can be contacted.
- 5. Federal funding sources -
 - a. Land and Water Conservation Fundf .ids are given to the state to buy open space lands which may contain wetlands. Contact the MDNR Office of Budget and Federal Aid.
 - b. U.S. Fish and Wildlife Service grants under the Pittman-Robertson Actfunds are given to the state for acquisition of wildlife areas and wildlife restoration. Funds are from a tax on ammunition and weapons. Contact the MDNR Wildlife Division.
 - c. Dingell-Johnson monies to states to cover 75% of the cost of fish restoration and management projects. Contact the MDNR Fisheries Division.
 - d. Coastal Zone Management Act this Act provides funds for limited acquisition of estuarine sanctuaries and may be appropriate on the Great Lakes. Contact the MDNR Land and Water Management Division.

The Grass River Natural Area (GRNA) in Antrim County is an example of a successful cooperative wetland purchase effort. The GRNA is approximately 1,000 acres and is managed by a nonprofit organization along with the Antrim County Board of Commissioners. With the assistance of The Nature Conservancy and the Soil Conservation Service, about 1,000 acres of land were acquired by purchase, by direct donation from individuals, and by transfer from the State of Michigan and the Department of Natural Resources. The Three Lakes Association was the original sponsor of the project and has continued its

involvement with the project.

The Skegemog Lake Wildlife Area located in Kalkaska County is another example of a wetland purchase project. A few of the organizations involved in the Skegemog project are the Kalkaska Soil Conservation Commission, the Elk-Skegemog Lakes Association, The Nature Conservancy, and numerous individuals. The Michigan Land Trust Fund provided some of the funding for purchase.

Both of these projects were made possible by dedicated local citizens who initiated the efforts. The grassroots education and involvement of numerous agencies and organizations was also key to their success. Following these models in other parts of the state will help preserve valuable wetland habitats for future generations.



SUMMARY

With the support and involvment of citizens and private organizations, and state, federal, and local governments, we can continue to seek ways to best protect our valuable wetland resources. Our understanding of the public benefits inherent in these resources continues to grow as does our knowledge of the losses and expenses suffered by the public as these areas have been destroyed. It is hoped that the information provided here will add to an understanding of the regulatory and nonregulatory processes available for protecting wetlands and will assist those that become involved in wetland issues or permit processes. For further information, contact the Wetland Protection Unit, Land and Water Management Division, Michigan Department of Natural Resources.

FOR FURTHER READING

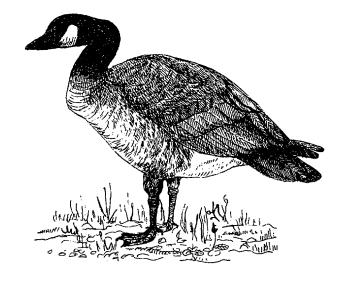
A Guide to Michigan's Watercourse and Wetland Protection Laws, 1981, East Michigan Environmental Action Council, Birmingham, Ml.

The Audubon Society Nature Guides: Wetlands, 1985, William A. Niering, Alfred A. Knopf, New York, NY.

Wetland Plants of the State of Michigan, 1986, Porter B. Reed, Jr., National Wetlands Inventory, St. Petersburg, FL.

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Michigan Wetlands: Yours to Protect, 1987, Tip of the Mitt Watershed Council, Conway, MI.



Act No. 203 Public Acts of 1979 Approved by Governor January 3, 1980

STATE OF MICHIGAN 80TH LEGISLATURE REGULAR SESSION OF 1979

Introduced by Senators Kammer, Hertel, Allen, G. Hart, Pierce, Corbin, Plawecki, Monsma, Kelly, Ross and Faust

ENROLLED SENATE BILL No. 3

AN ACT to provide for the preservation, management, protection, and use of wetlands; to require permits to alter certain wetlands; to provide for a plan for the preservation, management, protection, and use of wetlands; and to provide remedies and penalties.

The People of the State of Michigan enact:

- Sec. 1. This act shall be known and may be cited as the "Goemaere-Anderson wetland protection act".
- Sec. 2. As used in this act:
- (a) "Department" means the department of natural resources.
- (b) "Director" means the director of the department of natural resources:
- (c) "Fill material" means soil, rocks, sand, waste of any kind, or any other material which displaces soil or water or reduces water retention potential.
- (d) "Minor drainage" includes ditching and tiling for the removal of excess soil moisture incidental to the planting, cultivating, protecting, or harvesting of crops or improving the productivity of land in established use for agriculture, horticulture, silviculture, or lumbering.
 - (e) "Municipality" means a city, village, township, or county.
- (f) "Person" means an individual, sole proprietorship, partnership, corporation, association, municipality, this state, and instrumentality or agency of this state, the federal government, or an instrumentality or agency of the federal government, or other legal entity.
- (g) "Wetland" means land characterized by the presence of water at a frequency and duration sufficient to support and that under normal circumstances does support wetland vegetation or aquatic life and is commonly referred to as a bog, swamp, or marsh and which is any of the following:
 - (i) Contiguous to the Great Lakes or Lake St. Clair, an inland lake or pond, or a river or stream.
- (ii) Not contiguous to the Great Lakes, an inland lake or pond, or a river or stream; and more than 5 acres in size; except this subdivision shall not be of effect, except for the purpose of inventorying, in &counties of less than 100,000 population until the department certifies to the commission of natural resources it has substantially completed its inventory of wetlands in that county.

(iii) Not contiguous to the Great Lakes, an inland lake or pond, or a river or stream; and 5 acres or less in size if the department determines that protection of the area is essential to the preservation of the natural resources of the state from pollution, impairment, or destruction and the department has so notified the owner; except this subdivision may be utilized regardless of wetland size in a county in which subdivision (ii) is of no effect; except for the purpose of inventorying, at the time.

Sec. 3. (1) The legislature finds that:

- (a) Wetland conservation is a matter of state concern since a wetland of 1 county may be affected by acts on a river, lake, stream, or wetland of other counties.
- (b) A loss of a wetland may deprive the people of the state of some or all of the following benefits to be derived from the wetland:
 - (i) Flood and storm control by the hydrologic absorption and storage capacity of the wetland.
- (ii) Wildlife habitat by providing breeding, nesting, and feeding grounds and cover for many forms of wildlife, waterfowl, including migratory waterfowl, and rare, threatened, or endangered wildlife species.
- (iii) Protection of subsurface water resources and provision of valuable watersheds and recharging ground water supplies.
 - (iv) Pollution treatment by serving as a biological and chemical oxidation basin.
- (v) Erosion control by serving as a sedimentation area and filtering basin, absorbing silt and organic matter.
 - (vi) Sources of nutrients in water food cycles and nursery grounds and sanctuaries for fish.
- (c) Wetlands are valuable as an agricultural resource for the production of food and fiber, including certain crops which may only be grown on sites developed from wetland.
- (d) That the extraction and processing of nonfuel minerals may necessitate the use of wetland, if it is determined pursuant to section 9 that the proposed activity is dependent upon being located in the wetland, and that a prudent and feasible alternative does not exist.
- (2) In the administration of this act, the department shall consider the criteria provided in subsection (1).
- Sec. 4. The department may enter into an agreement to make contracts with the federal government, other state agencies, municipalities, private agencies, or persons for the purposes of making studies for the efficient preservation, management, protection, and use of wetland resources. A study shall be available as a public record for distribution at cost as provided in section 4 of Act No. 442 of the Public Acts of 1976, being section 15.234 of the Michigan Compiled Laws.
- Sec. 5. Except as otherwise provided by this act or by a permit obtained from the department under sections 7 to 12, a person shall not:
 - (a) Deposit or permit the placing of fill material in a wetland.
 - (b) Dredge, remove, or permit the removal of soil or minerals from a wetland.
 - (c) Construct, operate, or maintain any use or development in a wetland.
 - (d) Drain surface water from a wetland.
- Sec. 6. (1) Activities which require a permit under Act No. 247 of the Public Acts of 1955, as amended, being sections 322.701 to 322.715 of the Michigan Compiled Laws, or Act No. 346 of the Public Acts of 1972, being sections 281.951 to 281.965 of the Michigan Compiled Laws, shall not require a permit under this act.
- (2) The following uses shall be allowed in a wetland without a permit subject to other laws of this state and the owner's regulation:
 - (a) Fishing, trapping, or hunting.
 - (b) Swimming or boating.
 - (c) Hiking.
 - (d) Grazing of animals.
- (e) Farming, horticulture, silviculture, lumbering, and ranching activities, including plowing, irrigation, irrigation ditching, seeding, cultivating, minor drainage, harvesting for the production of food, fiber, and forest products, or upland soil and water conservation practices.
- (f) Maintenance or operation of serviceable structures in existence on the effective date of this act or constructed pursuant to this act.
 - (g) Construction or maintenance of farm or stock ponds.

- (h) Maintenance operation, or improvement which includes straightening widening or deepening of the following which is necessary for the production or harvesting of agricultural products
 - (1) An existing private agricultural drain
- (n) That portion of a dram legally established pursuant to Act No 40 of the Public Acts of 1956 as amended, being sections 280 1 to 280 630 of the Michigan Compiled Laws which has been constructed or improved for dramage purposes
 - (111) A drain constructed pursuant to other provisions of this act
- (j) Construction or maintenance of farm roads forest roads, or temporary roads for moving mining or forestry equipment, if the roads are constructed and maintained in a manner to assure that any adverse effect on the wetland will be otherwise minimized
- (k) Dramage necessary for the production and harvesting of agricultural products if the wetland is owned by a person who is engaged in commercial farming and the land is to be used for the production and harvesting of agricultural products. Except as otherwise provided in this act land improved under this subdivision after the effective date of this act shall not be used for nonfarming purposes without a permit from the department. This subdivision shall not apply to a wetland which is contiguous to a lake or stream, or to a tributary of a lake or stream, or to a wetland which the department has determined by clear and convincing evidence to be a wetland which is necessary to be preserved for the public interest in which case a permit shall be required.
- (1) Maintenance or improvement of public streets highways or roads within the right of way and in such a manner as to assure that any adverse effect on the wetland will be otherwise minimized Maintenance or improvement does not include adding extra lanes increasing the right of way or deviating from the existing location of the street highway or road
- (m) Maintenance repair or operation of gas or oil pipelines and construction of gas or oil pipelines having a diameter of 6 inches or less, if the pipelines are constructed maintained or repaired in a manner to assure that any adverse effect on the wetland will be otherwise minimized
- (n) Maintenance repair, or operation of electric transmission and distribution power lines and construction of distribution power lines if the distribution power lines are constructed maintained or repaired in a manner to assure that any adverse effect on the wetland will be otherwise minimized
- (o) Operation or maintenance including reconstruction of recently damaged parts of serviceable dikes and levees in existence on the effective date of this act or constructed pursuant to this act
 - (p) Construction of iron and copper mining tailings basins and water storage areas
- (3) After the effective date of this act but immediately prior to the approval of a state program under section 404 of title 4 of the clean water act of 1977 33 U S C 1344 where a project solely involves the discharge of fill material subject to the individual permit requirements of section 404 of title 4 of the clean water act of 1977, 33 U S C 1344 an additional permit shall not be required by this act
- Sec 7 (1) Except as provided in section 8(4) to obtain a permit for a use or development listed in section 5 the person desiring the permit shall file an application with the department on a form provided by the department accompanied by a fee of \$25 00. A person who has a permit for the particular activity under Act No 346 of the Public Acts of 1972 or Act No 61 of the Public Acts of 1939 as amended being sections 319 1 to 319 27 of the Michigan Compiled Laws does not need to pay the fee prescribed by this subsection. The application shall include
 - (a) The person s name and address
 - (b) The location of the wetland
 - (c) A description of the wetland on which the use or development is to be made
 - (d) A statement describing the proposed use or development
 - (e) The wetland owners name and address
- (f) An environmental assessment on a form supplied by the department of the proposed use or development if requested by the department which shall include effects upon wetland benefits and the effects upon the water quality flow and levels and the wildlife fish and vegetation within a contiguous lake, river, or stream
- (2) For the purposes of subsection (1) a proposed use or development of a wetland shall be considered as a single permit application under this act if the scope extent and purpose of a use or development are made known at the time of the application for the permit
- Sec 8 (1) Within 60 days after receipt of the completed application and fee the department may hold a hearing. If a hearing is held, it shall be held in the county where the wetland on which the permit is to

- apply is located Notice of the hearing shall be made in the same manner as for the promulgation of rules under Act No 306 of the Public Acts of 1969 as amended being sections 24 201 to 24 315 of the Michigan Compiled Laws. The department may approve or disapprove a permit application without a public hearing unless a person requests a hearing in writing within 20 days after the mailing of notification of the permit application as required by subsection (3) or the department determines that the permit application is of significant impact to warrant a public hearing
- (2) If a hearing is not held the department shall approve or disapprove the permit application within 90 days after the completed permit application is filed with the department. If a hearing is held the department shall approve or disapprove the permit application within 90 days after the conclusion of the hearing. The department may approve a permit application request modifications in the application or deny the permit application. If the department approves the permit application the department shall prepare and send the permit to the applicant. If the department denies or requests a modification of the permit application the department shall send notice of the denial or modification request and the reasons for the denial or the modifications requested to the applicant. Department approval may include the issuance of a permit containing conditions necessary for compliance with this act. If the department does not approve or disapprove the permit application within the time provided by this subsection the permit application shall be considered approved and the department shall be considered to have made the determinations required by section 9. The action taken by the department may be appealed pursuant to Act. No. 306 of the Public Acts of 1969 as amended A property owner may after exhaustion of administrative remedies bring appropriate legal action in a court of competent jurisdiction.
- (3) A person who desires notification of pending permit applications may make a written request to the department accompanied by an annual fee of \$25 00 which shall be credited to the general fund of the state. The department shall prepare a biweekly list of the applications made during the previous 2 weeks and shall promptly mail copies of the list for the remainder of the calendar year to the persons who requested notice. The biweekly list shall state the name and address of each applicant the location of the wetland in the proposed use or development including the size of both the proposed use or development and of the wetland affected and a summary statement of the purpose of the use or development.
- (4) A municipality, by ordinance may provide for more stringent definition and regulation of wetland than is provided under this act. This subsection is supplemental to the existing authority of a municipality to protect wetland Each municipality which adopts an ordinance regulating wetlands shall notify the department. The department shall develop an agreement with each municipality which has an ordinance regulating wetlands. The agreement shall provide for an exchange of information with the department including information regarding the environmental impact of each proposed use or development on wetlands the proposed decision on each application for a proposed use or development on wetlands and other information that may assist the municipality in administering its ordinance. The agreement shall provide that the department shall not issue a permit if the municipality has denied permission for the permit under its ordinances unless the permit involves a use or development of regional or statewide public benefit The agreement shall require that the municipality use an application form supplied by the department and that each person applying for a permit make application directly with the municipality Upon receipt the municipality shall forward a copy of each application to the department The department shall begin reviewing the application as provided in this act. The municipality shall review the application pursuant to its ordinance and shall modify approve or deny the application within 60 days after receipt The department shall inform any interested person whether a municipality has an ordinance regulating wetlands If the department receives an application with respect to a wetland which is located in a municipality which has an ordinance regulating wetlands the department immediately shall forward the application to the municipality which shall modify deny, or approve the application under this subsection The municipality shall notify the department of its decision. The department shall proceed as provided in
- (5) If a municipality does not have an ordinance regulating wetlands, the department shall promptly send a copy of the permit application to the municipality where the wetland is located. The municipality may review the application, may hold a hearing on the application and may recommend approval modification or denial of the application to the department. The recommendations of the municipality shall be made and returned to the department within 45 days after the municipality's receipt of the permit application. The department shall approve modify or deny the application as provided in this act
- Sec 9 (1) A permit for an activity listed in section 5 shall not be approved unless the department determines that the issuance of a permit is in the public interest that the permit is necessary to realize the benefits derived from the activity and that the activity is otherwise lawful
- (2) In determining whether the activity is in the public interest, the benefit which reasonably may be expected to accrue from the proposal shall be balanced against the reasonably foreseeable detriments of the

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- activity. The decision shall reflect the national and state concern for the protection of natural resources from pollution, impairment, and destruction. The following general criteria shall be considered:
 - (a) The relative extent of the public and private need for the proposed activity.
- (b) The availability of feasible and prudent alternative locations and methods to accomplish the expected benefits from the activity.
- (c) The extent and permanence of the beneficial or detrimental effects which the proposed activity may have on the public and private uses to which the area is suited, including the benefits the wetland provides.
- (d) The probable impact of each proposal in relation to the cumulative effect created by other existing and anticipated activities in the watershed.
- (e) The probable impact on recognized historic, cultural, scenic, ecological, or recreational values and on the public health or fish or wildlife.
 - (f) The size of the wetland being considered.
 - (g) The amount of remaining wetland in the general area.
 - (h) Proximity to any waterway.
 - (i) Economic value, both public and private, of the proposed land change to the general area.
- (3) In considering a permit application, the department shall give serious consideration to findings of necessity for the proposed activity which have been made by other state agencies.
- (4) A permit shall not be issued unless it is shown that an unacceptable disruption will not result to the aquatic resources. In determining whether a disruption to the aquatic resources is unacceptable, the criteria set forth in section 3 and subsection (2) shall be considered. A permit shall not be issued unless the applicant also shows either of the following:
 - (a) The proposed activity is primarily dependent upon being located in the wetland.
 - (b) A feasible and prudent alternative does not exist.
- Sec. 10. (1) The department, after notice and opportunity for a public hearing, may issue general permits on a state or county basis for a category of activities if the department determines that the activities are similar in nature, will cause only minimal adverse environmental effects when performed separately, and will have only minimal cumulative adverse effect on the environment. A general permit issued under this subsection shall be based on the requirements of this act and the rules promulgated under this act, and shall set forth the requirements and standards which shall apply to an activity authorized by the general permit.
- (2) The department may impose conditions on a permit for a use or development if the conditions are designed to remove an impairment to the wetland benefits, to mitigate the impact of a discharge of fill material, or to otherwise improve the water quality.
- (3) The department may establish a reasonable time when the construction, development, or use is to be completed or terminated. A general permit shall not be valid for more than 5 years.
- Sec. 11. (1) A general permit may be revoked or modified if, after opportunity for a public hearing or a contested case hearing under Act No. 306 of the Public Acts of 1969, as amended, the department determines that the activities authorized by the general permit have an adverse impact on the environment or the activities would be more appropriately authorized by an individual permit.
 - (2) A permit may be terminated or modified for cause, including:
 - (a) A violation of a condition of the permit.
 - (b) Obtaining a permit by misrepresentation or failure to fully disclose relevant facts.
 - (c) A change in a condition that requires a temporary or permanent change in the activity.
- Sec. 12. (1) The department shall require the holder of a permit to provide information the department reasonably requires to obtain compliance with this act.
- (2) Upon reasonable cause or obtaining a search warrant, the department may enter on, upon, or through the premises on which an activity listed in section 5 is located or on which information required to be maintained under subsection (1) is located.
- Sec. 13. (1) If, on the basis of information available to the department, the department finds that a person is in violation of this act or a condition set forth in a permit issued under section 9 or 10, the department shall issue an order requiring the person to comply with the prohibitions or conditions or the department shall request the attorney general to bring a civil action under section 14(1).

- (2) An order issued under subsection (1) shall state with reasonable specificity the nature of the violation and shall specify a time for compliance, not to exceed 30 days, which the department determines is reasonable, taking into account the seriousness of the violation and good faith efforts to comply with applicable requirements.
- Sec. 14. (1) The attorney general may commence a civil action for appropriate relief, including injunctive relief upon request of the department under section 13(1). An action under this subsection may be brought in the circuit court for the county of Ingham or for a county in which the defendant is located, resides, or is doing business. The court has jurisdiction to restrain the violation and to require compliance with this act. In addition to any other relief granted under this section, the court may impose a civil fine of not more than \$10,000.00 per day of violation. A person who violates an order of the court shall be subject to a civil fine not to exceed \$10,000.00 for each day of violation.
- (2) A person who violates this act is guilty of a misdemeanor, punishable by a fine of not more than \$2,500.00.
- (3) A person who wilfully or recklessly violates a condition or limitation in a permit issued by the department under this act, or a corporate officer who has knowledge of or is responsible for a violation, is guilty of a misdemeanor, punishable by a fine of not less than \$2,500.00 nor more than \$25,000.00 per day of violation, or by imprisonment for not more than 1 year, or both. A person who violates this section a second or subsequent time is guilty of a felony, punishable by a fine of not more than \$50,000.00 for each day of violation, or by imprisonment for not more than 2 years, or both.
- (4) In addition to the penalties provided under subsections (1), (2), and (3), the court may order a person who violates this act to restore as nearly as possible the wetland which was affected by the violation, to its original condition immediately before the violation. The restoration may include the removal of fill material deposited in the wetland or the replacement of soil, sand, or minerals.
- Sec. 15. The fees and civil fines collected under this act shall be deposited in the general fund of the state.
- Sec. 16. If a permit is denied for a proposed wetland activity, the landowner may request a revaluation of the affected property for assessment purposes to determine its fair market value under the use restriction.
- Sec. 17. (1) The department shall promulgate and enforce rules to implement this act pursuant to Act No. 306 of the Public Acts of 1969, as amended.
- (2) If a person is aggrieved by any action or inaction of the department, the person may request a formal hearing on the matter involved. The hearing shall be conducted by the department pursuant to Act No. 306 of the Public Acts of 1969, as amended.
- (3) A determination, action, or inaction by the department following the hearing shall be subject to judicial review as provided in Act No. 306 of the Public Acts of 1969, as amended.
- (4) This section does not limit the right of a wetland owner to institute proceedings in any circuit of the circuit court of the state against any person when necessary to protect the wetland owner's rights.
- Sec. 18. (1) As inventories of wetland are completed, the inventories shall be used as 1 of the criteria by the department in issuing permits. The inventories shall be periodically updated. The maps, ground surveys, and descriptions of wetlands included in the inventories shall be submitted to the respective county register of deeds and shall become a public document available to review by any member of the public.
- (2) Aerial photographs and satellite telemetry data reproductions shall be made available to the respective county register of deeds for cost as determined by the department.
- Sec. 19. (1) The department shall make or cause to be made a preliminary inventory of all wetland in this state on a county by county basis and file the inventory with the agricultural extension office, register of deeds, and county clerk.
- (2) At least 2 hearings shall be held in each state planning and development region created by Executive Directive No. 1973-1. The hearing shall be held by the department after publication and due notice so that interested parties may comment on the inventory. After the hearings the department shall issue a final inventory which shall be sent and kept by the agricultural extension office, register of deeds, and county clerk. Legislators shall receive an inventory of a county or regional classification for their districts including both preliminary and final inventories unless the legislators request not to receive the materials.
 - (3) Before an inventory is made of a county, interested persons may request the department to inspect

property and the department shall make a written wetland determination. The determination shall be made within a reasonable time after the request. Completion of the inventory shall not delay implementation of this act.

- Sec 20 As wetland inventories are completed as specified in section 19 owners of record as identified by the current property tax roll shall be notified of the possible change in the status of their property Notification shall be printed on the next property tax bill mailed to property owners in the count. It shall contain information specifying that a wetland inventory has been completed and is on file with the agricultural extension office, register of deeds and county clerk and that property owners may be subject to regulation under this act
 - Sec 21 (1) This act shall not be construed to abrogate rights or authority otherwise provided by law
- (2) For the purposes of determining if there has been a taking of property without just compensation under Michigan law an owner of property who has sought and been denied a permit or has been made subject to modifications or conditions in the permit under this act or the department's action or in action pursuant to this act may file an action in a court of competent jurisdiction
- (3) If the court determines that an action of the department pursuant to this act constitutes a taking of the property of a person then the court shall order the department at the department's option to do one or more of the following
 - (a) Compensate the property owner for the full amount of the lost value
- (b) Purchase the property in the public interest as determined before its value was iffected by this act or the department's action or inaction pursuant to this act
- (c) Modify its action or maction with respect to the property so is to minimize the determinate affect to the property s value
- (4) For the purposes of this section the value of the property may not exceed that share which the area in dispute occupies in the total parcel of land of the state equalized evaluation of the total parcel multiplied by 2, as determined by an inspection of the most recent assessment roll of the township or city in which the parcel is located

Sec 22 This act shall take effect October 1 1980

This act is ordered to take immediate effect

Secretar of the Senate

Clerk of the House of Representatives

Approved

Governor



DEPARTMENT OF NATURAL RESOURCES

LAND AND WATER MANAGEMENT DIVISION

WETLAND PROTECTION

Filed with the Secretary of State on

June 22, 1988

These rules take effect 15 days after filing with the Secretary of State

(By authority conferred on the department of natural resources by section 17 of Act No. 203 of the Public Acts of 1979, being §281.717 of the Michigan Compiled Laws)

R 281.921 Definitions.

Rule 1. (1) As used in these rules:

(a) "Act" means Act No. 203 of the Public Acts of 1979, being §281.701 et seq. of the Michigan Compiled Laws.

(b) "Contiguous" means any of the following:

(i) A permanent surface water connection or other direct physical contact with an inland lake or pond, a river or stream, one of the Great Lakes, or Lake St. Clair.

(ii) A seasonal or intermittent direct surface water connection to an inland

lake or pond, a river or stream, one of the Great Lakes, or Lake St. Clair.

(iii) A wetland is partially or entirely located within 500 feet of the ordinary high watermark of an inland lake or pond or a river or stream or is within 1,000 feet of the ordinary high watermark of one of the Great Lakes or Lake St. Clair, unless it is determined by the department, pursuant to R 281.924(4), that there is no surface water or groundwater connection to these waters.

(iv) Two or more areas of wetland separated only by barriers, such as dikes, roads, berms, or other similar features, but with any of the wetland areas contiguous under the criteria described in paragraph (i), (ii), or (iii) of this subdivision.

The connecting waters of the Great Lakes, including the St. Marys, St. Clair, and Detroit rivers, shall be considered part of the Great Lakes for purposes of

this definition.

- (c) "General permit" means a permit which, as authorized by section 10 of the act, is issued for categories of minor activities, as defined in subdivision (f) of this subrule.
- (d) "Individual permit" means a permit which, as authorized by sections 7, 8, and 9 of the act, is issued for categories of activities that are not classified as minor.
 - (e) "Inland lake or pond, a river or stream" means any of the following:
- (i) A river or stream which has definite banks, a bed, and visible evidence of a continued flow or continued occurrence of water.
- (ii) A natural or permanent artificial inland lake or impoundment that has definite banks, a bed, visible evidence of a continued occurrence of water, and a surface area of water that is more than 5 acres. This does not include lakes constructed by excavating or diking dry land and maintained for the sole purpose of cooling or storing water and does not include lagoons used for treating polluted water.

(iii) A natural or permanent artificial pond that has permanent open water with a surface area that is more than 1 acre, but less than 5 acres. This does not include ponds constructed by excavating or diking dry land and maintained for the sole purpose of cooling or storing water and does not include lagoons used for treating polluted water.

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(f) "Minor activities" means activities that are similar in nature, that will cause only minimal adverse environmental effects when performed separately, and that will have only minimal cumulative adverse effects on the environment.

(g) "Wetland vegetation" means plants that exhibit adaptations to allow, under normal conditions, germination or propagation and to allow growth with at least their root systems in water or saturated soil.

(2) As used in the act:

(a) "Electric distribution line" means underground lines below 30 kilovolts and lines supported by wood poles.

(b) "Electric transmission line" means those conductors and their necessary supporting or containing structures located outside of buildings that are used for transmitting a supply of electric energy, except those lines defined in subdivision (a) of this subrule.

(c) "Pipelines having a diameter of 6 inches or less" means a pipe which is equal to or less than what is commonly referred to as a 6-inch pipe and which has an actual measured outside diameter of less than 6.75 inches.

(3) Terms defined in the act have the same meanings when used in these rules.

R 281.922 Permit applications.

Rule 2. (1) An application for a permit shall be made on a form prescribed and provided by the department.

(2) An application for a permit shall not be deemed as received or filed until the department has received all information requested on the application form, the application fee, and other information authorized by the act and necessary to reach a decision. The period for granting or denying an application begins as soon as all such information and the application fee are received by the department.

(3) Application fees shall be submitted to the department with the initial submittal of an application form. The fee shall be paid by check, money order,

or draft made payable to: "State of Michigan."

- (4) An application may be considered to be withdrawn and the file for the application may be closed if an applicant fails to respond to any written inquiry or request from the department for information requested as a part of the application form within 30 days of the request or such longer period of time as needed by the applicant to provide the information agreed to, in writing, between the applicant and the department.
- (5) Upon request, the department shall provide any person with a copy of a permit application and supporting documents consistent with all provisions of Act No. 442 of the Public Acts of 1976, as amended, being §15.231 et seq. of the Michigan Compiled Laws.
- (6) Decisions reached by the department which deny or modify an application for a permit shall be supported by written documentation to the applicant based upon the applicable criteria contained in section 9 of the act. The department shall create a form based on the criteria from section 9 of the act to be completed and placed into each application file. When a proposed activity involves a coordinated review by federal agencies as provided for under the act and section 404 of title 4 of the clean water act of 1977, 33 U.S.C. §1344, the department shall prepare a fact sheet pursuant to 40 C.F.R. §124.8 (April 1, 1983) and 40 C.F.R. §233.39 (April 1, 1983) for inclusion in the application file.

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R 281.923 Permits.

Rule 3. (1) An application for a proposed activity which is within a general permit category may be processed and issued by the department without the noticing or hearings specified under sections 7, 8, and 9 of the act. The department may process, by public notice, an application which would normally qualify under a general permit category to allow more opportunity for public review and comment. Categories of minor activities will be established in the general permit in accordance with section 10 of the act. The factors set forth in sections 3 and 9 of the act shall be considered in determining whether such a permit is in the best interest of the public.

(2) Applications for activities that are not classified as minor shall be reviewed through the process prescribed under sections 7, 8, and 9 of the act. The department may issue an individual permit 21 days after the mailing of notification of the permit application if comments of nonobjection have been received from the municipality, if a public hearing has not been requested, and if the proposed activities are otherwise in accordance with the act.

(3) If the department does not approve or disapprove the permit application within the time provided by section 8(2) of the act, the permit application shall be considered approved and the department shall be considered to have made the determination required by section 9 of the act.

- (4) When a project involves activities regulated under Act No. 247 of the Public Acts of 1955, as amended, being §322.701 et seq. of the Michigan Compiled Laws, or Act No. 346 of the Public Acts of 1972, as amended, being §281.951 et seq. of the Michigan Compiled Laws, or the act, the applicant shall submit 1 application for all activities regulated under these acts. Only 1 permit for these activities will be issued or denied by applying the criteria of the appropriate acts. If a permit is issued, conditions shall reflect the requirements of all appropriate acts.
- (5) A permit may be issued for a period extending until the end of the following calendar year. A permit may be issued for a longer period of time if agreed to, in writing, between the applicant and the department. Before a permit expires, extensions of time may be granted by the department upon receipt of a written request from the permit holder explaining why such an extension is needed to complete the project. Up to two 12-month extensions shall be granted if there is no change in the activity for which the permit was originally issued. Administrative fees shall not be required for such extensions.
- (6) Any permit issued under the act does not obviate the necessity of receiving, when applicable, approval from other federal, state, and local government agencies.
- (7) Any permit issued by the department under the act may be revoked or suspended, after notice and an opportunity for a hearing, for any of the following causes:
 - (a) A violation of a condition of the permit.
- (b) Obtaining a permit by misrepresentation or failure to fully disclose relevant facts in the application.
- (c) A change in a condition that requires a temporary or permanent change in the activity.

R 281.924 Wetland determinations.

Rule 4. (1) When performing wetland determinations, as required by section 19(3) of the act, the department shall utilize criteria consistent with the definition of "wetland" provided in section 2(g) of the act and shall provide a written response stating, to the legal landowner within 30 days of the on-site evaluation, whether the parcel contains wetland and the basis for that determination.

- (2) When performing wetland determinations, the department shall rely on visible evidence that the normal seasonal frequency and duration of water is above, at, or near the surface of the area to verify the existence of a wetland. Under normal circumstances, the frequency and duration of water that is necessary to determine an area to be a wetland will be reflected in the vegetation or aquatic life present within the area being considered. A wetland that has not been recently or severely disturbed will contain a predominance, not just an occurrence, of wetland vegetation or aquatic life. Where there is a predominance of wetland vegetation, and no direct visible evidence that water is, or has been, at or above the surface, the department shall use the following characteristics of the soils or substrate to verify the existence of a wetland:
- (a) The presence of a soil that is saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions in the upper part of the soil that favor the growth and regeneration of wetland vegetation.
- (b) Physical or chemical characteristics of a soil column which provide evidence of the current and recent degree of saturation or inundation. Characteristics, such as gleying, low chroma mottling, or chemically demonstrated anaerobic conditions, can be utilized to identify the current and recent depth and fluctuation of the water table or inundation.
- (3) If the department makes a determination that a wetland otherwise outside of the jurisdiction of the act is essential to the preservation of the natural resources of the state under section 2(g)(iii) of the act, it shall provide such findings, in writing, to the legal landowner stating the reasons for this determination. In making such a determination, 1 or more of the following functions shall apply to a particular site:
- (a) It supports state or federal endangered or threatened plants, fish, or wildlife appearing on a list specified in section 6 of Act No. 203 of the Public Acts of 1974, being \$299.226 of the Michigan Compiled Laws.
- (b) It represents what the department has identified as a rare or unique ecosystem.
 - (c) It supports plants or animals of an identified regional importance.
 - (d) It provides groundwater recharge documented by a public agency.
- (4) Upon the request of a property owner or his or her agent, the department shall determine if there is no surface or groundwater connection that meets the definition of contiguous under R 281.921(1)(b)(iii). The determination shall be made in writing and shall be provided to the property owner or agent within a reasonable period of time after receipt of the request.

R 281.925 Mitigation.

- Rule 5. (1) As authorized by section 10(2) of the act, the department may impose conditions on a permit for a use or development if the conditions are designed to remove an impairment to the wetland benefits, to mitigate the impact of a discharge of fill material, or otherwise improve the water quality.
- (2) The department shall consider a mitigation plan if submitted by the applicant and may incorporate the mitigation actions as permit conditions for the improvement of the existing wetland resources or the creation of a new wetland resource to offset wetland resource losses resulting from the proposed project. If agreed to by the applicant, financial assurances may be required to ensure that mitigation is accomplished as specified by the permit conditions. The department shall, when requested by the applicant, meet with the applicant to review the applicant's mitigation plan.
- (3) In developing conditions to mitigate impacts, the department shall consider mitigation to apply only to unavoidable impacts that are otherwise permittable utilizing the criteria under sections 3 and 9 of the act. Mitigation

shall not be considered when it is feasible and prudent to avoid impacts or when the impacts would be otherwise prohibited under the act.

(4) When considering mitigation proposals, the department shall make all of the following determinations:

(a) That all feasible and prudent efforts have been made to avoid the loss

of wetland resource values.

(b) That all practical means have been considered to minimize impacts.

(c) That it is practical to replace the wetland resource values which will be unavoidably impacted.

(5) If the department determines that it is practical to replace the wetland resource values which will be unavoidably impacted, the department shall consider all of the following criteria when reviewing an applicant's mitigation proposal:

(a) Mitigation shall be provided on-site where practical and beneficial to

the wetland resources.

- (b) When subdivision (a) of this subrule does not apply, mitigation shall be provided in the immediate vicinity of the permitted activity where practical and beneficial to the wetland resources. When possible, this means within the same watershed and municipality as the location of the proposed project.
- (c) Only when it has been determined that subdivisions (a) and (b) of this subrule are inappropriate and impractical shall mitigation be considered elsewhere.
- (d) Any proposal shall assure that, upon completion, there will be no net loss to the wetland resources.
- (e) The proposal shall give consideration to replacement of the predominant functional values lost within the impacted wetland.
- (6) Except where a mitigation plan is to occur on state or federally owned property or where the mitigation is to occur in the same municipality where the project is proposed, the municipality where the proposed mitigation site is located shall be given notice and an opportunity to comment in writing to the department on the proposed mitigation plan before a permit is issued.
- (7) Any mitigation activity shall be completed before initiation of other permitted activities, unless a phased concurrent schedule can be agreed upon between the department and the applicant.
- (8) Monitoring to establish documentation of the functional performance of the mitigation may be required as permit conditions, as well as necessary corrective actions required, to deliver the wetland resource values identified.
- (9) Mitigation, by replacement of lost wetland resources, shall not be required if an activity is authorized and permitted under the authority of a general permit issued under section 10(1) of the act.

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REPORT: W - 1 DATE:

08/10/88

10:31 TIME:

FREQUENCY: WEEKLY (07/25/88-07/29/88)

DEPARTMENT OF NATURAL RESOURCES LAND RESOURCE PROGRAMS DIVISION

LIST OF NEW PERMIT APPLICATIONS

DATE APPLICATION COMPLETE	APPLICATION FILE NUMBER	PERMIT TYPE	PROJECT TYPES	COUNTY		TOWNSHIP/ RANGE	SECTION	SUBDIVISION	CLAIM/ LOT	BODY OF WATER
07/27/88	88-01-0062 USDA FOREST	ACT 346 , SERVICE ;	12 500 N MOORE ST	GOGEBIC . BESSEMER,	MI	49N 46W 49911	03			BLACK RIVER
07/26/88	88-02-0061 RAYGO	ACT 346 , EDWARD G;	12 3918 N SHORE D	MENOMINEE R, MENOMINE,	MI	32N 27W 49858	13			POND
07/25/88	88-03-0090 DELTA SOLID	ACT 346 , WASTE MG;	52 PO BOX 198	DELTA , ESCANABA,	1M	39N 23W 49829	22			UNKNOWN
07/25/88	88-03-0092 ANDERSON	ACT 346 . DALE L :	37 438 NORTH RD	MARQUETTE , NEGAUNE ,	MI	48N 27W 49866	13			POND
)7/25/88	88-03-0093 ESCANABA	ACT 247 . CITY OF ;	12 20 121 S 11TH ST	DELTA , ESCANABA,	MI	39N 22W 49829	29 32			LAKE MICHIGAN
.)7/27/88	88-03-0094 ERICKSON	ACT 203 , DONALD J;	37 5470 25TH RD	DELTA , GLADSTON,	IM	41N 22W 49837	32			WETLAND
07/25/88	88-04-0204 ST IGNACE	ACT 247 , CITY OF ;	20 396 N STATE ST	MACKINAC , ST IGNAC,	ΙM	40N 03W 49781				LAKE HURON
u 7 /25/88	88-04-0205 GRAY FAMILY	ACT 247	14 BOX 167 RR 1	MACKINAC , CEDARVIL,	MI	41N 01E 49719	04			LAKE HURON
07/26/88	88-04-0207 STRAUSS	ACT 247 . FRED ;	14 YACHT HAVEN	CHIPPEWA , DRUM ISL,	IM	42N 05E 49726	23			LAKE HUROŅ
Q7/26/88	88-04-0207 STEINER	ACT 203 , LLOYD ;	11 140 COLLINS	MACKINAC . ST IGNAC,	MI	42N 06W 49781	29			WETLAND
07/26/88	88-04-0208 DAMASKE	ACT 247 , EARL ;	12 YACHT HAVEN	CHIPPEWA , DRUM ISL,	MI	42N OGE 49726	18			LAKE HURON
07/27/88	88-04-0209 HYDE	ACT 346 , FREDERIC;	O2 PO BOX 63	SCHOOLCRAFT, MANISTIQ.	ΜI	42N 16W 49854	34			INDIAN LAKE
(:7/27/88	88-04-0210 FERNBACHER	ACT 247 , JOHN ;	12 RR 1 BOX 534	MACKINAC , CEDARVIL,	ΙM	41N O2E 49719				LAKE HURON
U7/27/88	88-04-0211 SAULT STE M	ACT 346 IR, PARKS ;	26 325 COURT ST	CHIPPEWA , SL ST MR,	1M	47N O1E 49783				ST MARYS RIVER
07/27/88	88-04-0212 SAULT STE M	ACT 346 IR, PARKS ;	26 325 COURT ST	CHIPPEWA . SL ST MR,	IM	47N 01E 49783				ST MARYS RIVER
07/27/88	88-04-0213 DEAR	ACT 346 , JIM ;	O3 4871 NIWLET RD	CHIPPEWA . SL ST MR.	мі	47N 01E 49783				ST MARYS RIVER